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ON TAP

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DOVE LAKE – A WORKING RESERVOIR

Common sense dictates that a diverse investment portfolio is extremely important to a secure financial future. It is no different for water purveyors. The District's water portfolio is comprised of a variety of water sources to meet different types of needs. These sources include imported drinking water supplies, local groundwater supplies (or well water), recycled water, and urban runoff water. Collectively, these different water sources ensure service reliability to our customers.

Historically, TCWD has made a practice of using recycled water for the purpose of irrigation whenever possible. The nasty truth is that recycled water, or purple pipe water, is produced from sewage. The Robinson Ranch Wastewater Treatment Plant (WWTP) provides treatment to the sewage that is collected from all the residential communities located on the upper Plano in the District's service area.

Once the sewage influent is treated in compliance with Title 22 Regulations of the Health and Safety Code of the State of California, the recycled water is stored in the Recycled Water Reservoir at the WWTP. This water is then used for the irrigation of the green belts, street medians, and various parks in the District, as well as the Dove Canyon golf course. Sometimes though, the demand for recycled water can be so great that the WWTP's recycled water production alone is insufficient.

In order to supplement the demand of recycled water throughout the year, the District owns and uses the urban and storm water runoff in Dove Lake, which is located in the Dove Canyon community. Dove Lake is a man-made lake with over five hundred acre-feet

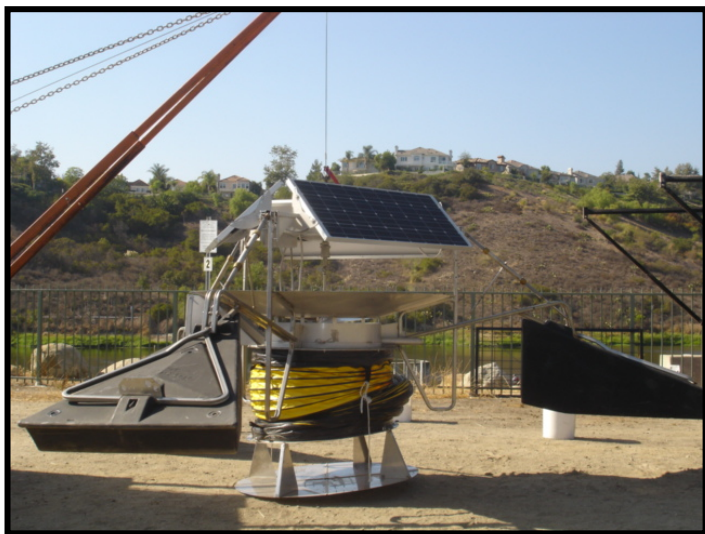
of water which the District acquired ownership of Dove Lake in the early 1990's.

When additional recycled water is needed during the warm season, the District pumps Dove Lake water back to the Recycled Water Reservoir at the WWTP for distribution to the recycled water users. The District actively monitors Dove Lake to ensure a water quality level that is consistent with Title 22 Regulations. District Operators routinely test the water's dissolved oxygen levels and collect samples from Dove Lake to determine the overall water quality.

TCWD preserves the water quality in Dove Lake through two different methods. The first way this is accomplished is through a series of air diffusers which are strategically located throughout the lake. Although significantly larger in size, these air diffusers are designed similarly to the type of sandstones that are used in aquariums. The air diffusers are powered by air compressors that aerate the lake water by pumping compressed air into the water. The pumped air helps to maintain the water's dissolved oxygen levels, which can prevent the growth of algae and other waterborne nuisances.

The second method used to maintain the water quality of Dove Lake is through the application of the two Solar Bee devices (pictured on page two). Dove Canyon residents and Dove Lake visitors will notice the two devices floating on the lake surface. The Solar Bee devices are solar-powered mixers which are designed to evenly mix the oxygenated water at a slow rate throughout the entire lake. These devices have an adjustable uptake tube that can be extended to twenty feet below the lake surface. This design

allows the District to successfully aerate the lake water to a greater depth, which in turn allows the potential for recycling more water without the risk of depleting oxygen levels.



Solar Bee Mixer prior to install

In total, TCWD processes an average of 100 acre feet per year from Dove Lake, which represents about fifteen percent of the total amount of recycled water used annually for irrigation by District customers. By augmenting the recycled water system with water from Dove Lake, TCWD is able to keep recycled water rates low for homeowner associations and other recycled water users in our service area. Additionally, it is through these recycling efforts that TCWD can effectively manage our annual drinking water allotment.

CONTROL BOARD VIOLATION FINE UPDATE

As discussed in last month's issue of On Tap, the San Diego Regional Water Quality Control Board, Region Nine, has imposed a violation fine on Santa Margarita Water District (SMWD) for the March 2010 Tijeras Creek sewer force main break, which resulted in a spill of 2.3 million gallons. This isolated incident has long reaching effects that are not limited to SMWD.

Unfortunately, this situation also affects TCWD in two ways which may not seem obvious to the casual observer. First, SMWD received assistance from numerous local agencies, including TCWD, in response to the serious spill and during the repair work because of a shared and vested interest in the sewer infrastructure. This assistance represents a cost

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to TCWD in the form of District-owned equipment use and employee labor.

Secondly, due to long standing agreements between the two agencies, TCWD is responsible for a portion of the violation fine. This portion represents a percentage of the sewer flow during the line break, as TCWD has storage capacity at SMWD's Chiquita Water Treatment Plant. In the end, TCWD's total portion stands to be in the range of \$60,000 to \$120,000. The final amount depends on mitigation efforts required by the involved regulatory agencies, which are designed to prevent this type of incident occurring again.

TCWD will continue to keep you updated as this situation develops.

MWD POSSIBLE RATE INCREASE

TCWD is currently reviewing initial projections from Metropolitan Water District (MWD) concerning a possible water rate increase effective January 1, 2012. A Special Board Meeting is scheduled for October 11, 2011, at 6:00 PM at TCWD's Main Office to review the preliminary data. The public is welcome to attend in order to learn more about this process.

BOARD OF DIRECTORS MEETING

The Regular Board of Directors Meeting is held on the third Wednesday of each month at 7:00 p.m. at the District's office located at 32003 Dove Canyon Drive, Trabuco Canyon. The public is encouraged to attend.

BOARD MEETING HIGHLIGHTS

The Board Meeting was held on September 21, 2011, and the following items are highlights from the Meeting:

- Status update relating to Storm Damage
- Status update relating to Baker Regional Water Treatment Facility
- Discussion relating to Saddle Crest Homes
- Discussion and Ratification relating to TCWD Revised Salary Schedule
- Discussion relating to proposed MWD/MWDOC Rate Increase
- Discussion relating to adjustment to sewer flat fees